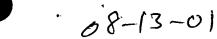
TOPOUVNOU COOL



IN THE UNITED STATES PATENT AND TRADEMARK

Box New Patent Application Commissioner for Patents Washington, D.C. 20231

Attorney's Docket No.: 60409.300903



FILING TRANSMITTAL

Transmitted herewith for filing is the Patent Application of: Paul Cheng, Nelson L. Chow and Fangli Chien

"LARGE DATABASE SEARCH USING CAM AND HASH" For:

ENCLOSURES							
	40 page application including specification, claims, abstract; 10 sheets (Figs. 1 – 11b) of ☐ informal/☒ formal drawings; 1 sheet of tables as drawing (Tables as Drawings 1 – 3) A Declaration, Power of Attorney & Petition (☒ signed/☐ unsigned); A postcard for return to us as proof of receipt of the referenced documents.						
\boxtimes	An Assignment of the invention with an assignment cover sheet;						
	IDS (form PTO-1449) and copies of references;						
	An Associate Power of Attorney;						
H	A certified copy of the priority document (Under 35 USC 119); A Power of Attorney by Assignee;						
	TYPE OF FILING						
	This application claims the benefit of an earlier filed Patent Application Number *****, filed ***** (35 USC 120).						
	This application claims the benefit of the priority date of an earlier filed U.S. Provisional Patent Application Serial, filed (35 USC 119).						
	This is an application filed pursuant to 37 CFR 1.53, permitting receipt of a filing date upon filing of specification, claims and drawings, if required, with applicant being given a period of one month from the date of notice to file the fee and oath or declaration.						
\boxtimes	In the event any parts of this application are missing, please treat this as a filing under						
	37 CFR 1.53 as defined just above.						
Postal S	CERTIFICATE OF MAILING (37 CFR 1.10(A)) ICATE OF MAILING BY "EXPRESS MAIL" - Rule 10: I hereby certify that this correspondence is being deposited with the U. S. Service "Express Mail Post Office to Addressee" under 37 CFR 1.10 as Express Mail No. EL834483834US addressed to the sioner for Patents, Washington, D.C. 20231 on August 9, 2001 by Lori Cox.						
	ate: August 9, 2001 Lori Cok						

Attorney Docket No.: 60409.300901 PATENT FILING TRANSMITTAL Docket No.: 60409.300

LARGE DATABASE SEARCH USING CAM AND HASH

Inventors: CHENG, Paul; CHOW, Nelson L.; and CHIEN, Fangli

Atty. ref.: 60409.300901

THIS CORRESPONDENCE CHART IS FOR EASE OF UNDERSTANDING AND INFORMATIONAL PURPOSES ONLY, AND DOES NOT FORM A PART OF THE FORMAL PATENT APPLICATION.

10 12	search engine controller	228a-d	paths
14	hash function	300	search engine
16		310	H-CAM
16a	memory base region	312	controller
16b	conflicts region	314	
18	address bus	314a	memory base region
20	result bus		conflicts regions
20	result ous	3140-6	search data bus
50	soorch angina	318	address bus
52	search engine controller	320	result bus
54	CAM		hash units
	-		
56	memory		CAM units
58	search data bus	326	logic unit
60	address bus	328a-j	pains
62	result bus	400	1
100		400	search engine
100	search engine	410	H-CAM
110	hash pointer unit	412	controller
112	controller	414	memory
114	memory		base region
116	hash function		conflicts regions
118	address bus	416	search data bus
120	pointer bus	418	address bus
122	result bus	420	result bus
			hash units
200	search engine		CAM units
210	H-CAM	426	logic unit
212	controller	428a-e	•
214	memory	430	programming unit
214a	base region		
214b	conflicts region	500	process
216	search data bus	510-55	0 steps
218	address bus		
220	result bus	600	search engine
222	hash unit	610	H-CAM
224	CAM unit	612	controller
226	logic unit	614	memory

Docket No.: 60409.30



620	result bus	878	output logic sub-unit
622	hash unit	880	search data storage
624	CAM unit	882	comparator
640	logic unit	884	output logic sub-unit
652	comparison section	886	input path
654	search data storage	888	hit line
656	comparator		
658	logic unit	900	search engine
660	hash pointer memory	910	H-CAMs
662	search data memory	912	controller
664	hit line	914	memory
		916	search data bus
700	search engine	918	address bus
710	H-RAM	920	result bus
712	controller	922	expansion bus
714	memory	924	hit line
722	hash unit		
740	logic unit	1000	search engine
752	comparison section	1010	H-RAMs
754	search data storage	1012	controller
756	comparator	1014	memory
758	logic unit	1016	search data bus
766	comparison section	1018	address bus
	•	1020	result bus
800	search engine	1022	expansion bus
810	H-CAM		•
812	controller	1100	search engine
814	memory	1110a	CAMs
862	hash blocks	1110b	H-CAMs
864	CAM block	1110c	H-RAMs
866	comparison section	1112	controller
868	main logic unit	1114	memory
870	input logic sub-units	1116	search data bus
872	hash unit	1118	address bus
874	input logic sub-unit	1120	result bus
876	CAM units	1122	expansion bus